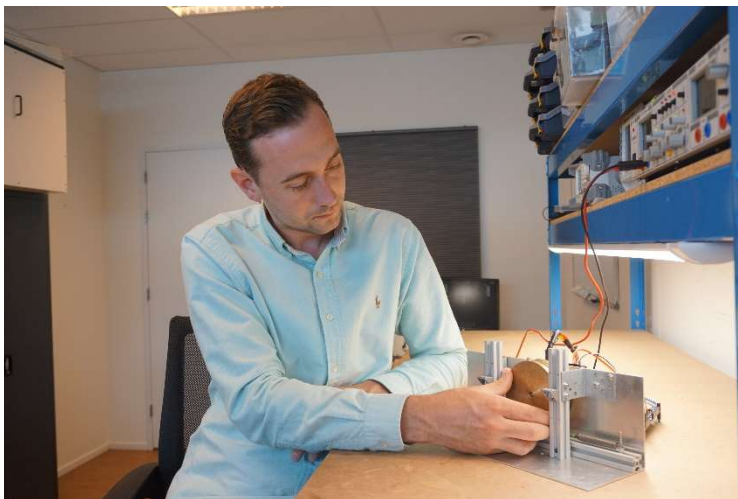


## SG Healthcare Case Story

### A strong consortium for Eurostars project STABLE thanks to Enterprise Europe Network Services of The Netherlands and Germany.

22 million people worldwide suffer from **violent involuntary tremors in the arms**. This makes it difficult for people with Parkinson's disease to cope with daily tasks such as eating and drinking. [STIL B.V.](#) located in Delft devised a method to suppress these tremors. With the help of the Enterprise Europe Network, a strong consortium of European partners was formed to develop an anti-tremor brace

#### Solving a real problem



*IJsbrand de Lange*

It all started at **Delft University of Technology**, where **STIL CEO IJsbrand de Lange** studied Biomechanical Engineering. He saw the shaking hands of people with Parkinson's primarily as a technical problem and looked for a solution. De Lange invented a **new technique to suppress the vibrations and stabilize the arm**. In 2017 he started his company **STIL B.V.** that develops a **wrist brace** that can suppress a tremor in the arm by means of "anti-vibrations". The brace offers a solution for people with Parkinson's

disease or Essential Tremor. About 5% of people over 65 and 10% over eighty suffer from such a tremor. This problem is increasing with the aging population, but there is still no effective and satisfying treatment method for it.

The development of medical equipment is a long and costly process, mainly because of the necessary scientific evidence that needs to be provided. **De Lange contacted the Netherlands Enterprise Agency (NEA)** for advice on support for development and funding. He learned that the **Eureka Eurostars funding could support his development plans**. STIL B.V. was in contact with **Fraunhofer Instituut**

(IBMT) because of their expertise in tremor suppressing technology and hardware development in this field and decided to look for additional European partners to build a bigger consortium.

### **The partner search service of the EEN works!**

NEA is part of the Enterprise Europe Network (EEN) and EEN advisor Michelle Lemmers contacted her colleagues with a short description of the intended project, a description of the expertise and the kind of partners STIL was looking for. **Four reactions were taken into consideration** and the German company [senetics](#), proposed by Ms Martina Schuhmacher of Bayern Innovativ, joined the collaboration of STIL and Fraunhofer Institut (IBMT). The Swiss university FHNW completed the consortium.

[Senetics healthcare group GmbH & Co. KG](#) is a developing and consulting company (SME) in the area of **R&D, medical technology, pharmacy and biotechnology**. The business activities of senetics contain a great expertise in medical purposes such as testing, medicine and regulatory affairs, contract development, trainings and consulting regarding the product placement of new products.

The **funding was awarded** and the project “Supressing Tremor to a Bearable Level” (STABLE) started in the beginning of 2020. Within this project, senetics is responsible for the development of the energy management system (EMS). On the one hand, the EMS will provide energy for all different components of the device and on the other hand, it will help manage energy resources between these components. The battery system has passed preliminary tests at senetics successfully and will already go into the first integration test this year with a further component of the wrist brace, which is developed in parallel by STIL B.V. As a second task, senetics will develop a test-setup where the finalized device will undergo safety testing, before it can enter into pre-clinical trials.



*Dr. Wolfgang Sening (on the right) and Dr. Michael Wiehl*

**IJsbrand de Lange:** *“As a child, I was fascinated by technology and wanted to become an inventor. Now as an entrepreneur I can give people a better life with self-developed medical technology. That is very inspiring. I can't wait until the STIL brace is on the market and can actually help millions of people.”*

**Dr. Wolfgang Sening:** *“The support and cooperation with the EEN, especially with Mrs. Schuhmacher (Bayern Innovativ), was precious for senetics. Without the commitment of EEN, the project would not have been as successful.”*